

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An apparatus comprising:
 - a first layer having a first at least one interconnect formed in an interlayer dielectric (ILD);
 - a second layer formed over the first layer, the second layer having a second at least one interconnect, and wherein the second layer comprises a first sublayer and a second sublayer, the first sublayer is between the first layer and the second sublayer, and the second sublayer is between the first sublayer and the third layer, the first sublayer comprising an ILD, and the second sublayer comprising air;
 - a third layer formed over the second layer, the third layer defining at least one air gap between the second at least one interconnect and the third layer; and
 - at least one shunt comprising a first material different from a second material of the first and second at least one interconnects selectively covering the top of the first and second at least one interconnects, wherein the first material has a property that inhibits electromigration ~~or diffusion~~ of the second material into the second layer or third layer.
2. (Original) The apparatus of claim 1, further comprising a barrier layer to support the first and second at least one interconnects.
3. (Original) The apparatus of claim 2, wherein the barrier layer has a thickness of between 50 and 500 Angstroms.
4. (Original) The apparatus of claim 1, further comprising:
 - at least one via having a via plug, the via plug is selected from the group consisting of cobalt and nickel.
5. (Original) The apparatus of claim 4, wherein the via plug is deposited using electroless deposition.

6. (Cancelled)

7. (Previously Presented) The apparatus of claim 1, wherein the second at least one interconnect is within the second sublayer.

8. (Original) The apparatus of claim 1, wherein the second layer comprises air.

9-21 (Cancelled)

22. (Previously Presented) The apparatus of claim 1, wherein the first material comprises one of nickel, cobalt, a nickel alloy, and a cobalt alloy.

23. (Previously Presented) The apparatus of claim 22, wherein the first material comprises an electroless conductor.

24. (Currently Amended) An apparatus comprising:

a first layer having a first at least one interconnect formed in an interlayer dielectric (ILD);

a second layer formed over the first layer, the second layer having a second at least one interconnect, and wherein the second layer comprises a first sublayer and a second sublayer, the first sublayer is between the first layer and the second sublayer, and the second sublayer is between the first sublayer and the third layer, the first sublayer comprising an ILD, and the second sublayer comprising air;

a third layer formed over the second layer, the third layer defining at least one air gap between the second at least one interconnect and the third layer; and

at least one shunt comprising a first material different from a second material of the first and second at least one interconnects selectively covering the top of the first and second at least one interconnects ~~The apparatus of claim 1,~~ wherein the second at least one interconnect comprises a metal exposed to the at least one air gap.

25. (Currently Amended) An apparatus comprising:

a first layer having a first at least one interconnect formed in an interlayer dielectric (ILD);

a second layer formed over the first layer, the second layer having a second at least one interconnect, and wherein the second layer comprises a first sublayer and a second sublayer, the first sublayer is between the first layer and the second sublayer, and the second sublayer is between the first sublayer and the third layer, the first sublayer comprising an ILD, and the second sublayer comprising air;

a third layer formed over the second layer, the third layer defining at least one air gap between the second at least one interconnect and the third layer; and

at least one shunt comprising a first material different from a second material of the first and second at least one interconnects selectively covering the top of the first and second at least one interconnects~~The apparatus of claim 3, wherein the barrier layer has a thickness sufficient to act as a diffusion layer to prevent the second material from diffusing into the second or third layer, to act as an adhesion layer between the first material and the second material, to carry an electrical current between a first shunt covering the top of the first at least one interconnect and a second shunt covering the top of the second at least one interconnect, and to provide additional mechanical strength for the structure in the at least one air gap.~~

26. (Currently Amended) An apparatus comprising:

a first layer having a first at least one interconnect formed in an interlayer dielectric (ILD);

a second layer formed over the first layer, the second layer having a second at least one interconnect, and wherein the second layer comprises a first sublayer and a second sublayer, the first sublayer is between the first layer and the second sublayer, and the second sublayer is between the first sublayer and the third layer, the first sublayer comprising an ILD, and the second sublayer comprising air;

a third layer formed over the second layer, the third layer defining at least one air gap between the second at least one interconnect and the third layer; and

at least one shunt comprising a first material different from a second material of the first and second at least one interconnects selectively covering the top of the first and second at least one interconnects~~The apparatus of claim 2, wherein the barrier layer comprises one of electroless nickel and electroless cobalt.~~